



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,340	05/09/2001	Barry Bronson	10006196-1	3032

7590 05/16/2005  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/851,340

**Applicant(s)**

BRONSON, BARRY

**Examiner**

Kimnhung Nguyen

**Art Unit**

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This application has been examined. The claims 1-21 are pending. The examination results are as following.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 8, 13, 16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartmut (JP 09-220200).

Regarding claim 1, Hartmut discloses in fig. 2, a method of displaying frames images using a wearable display device, comprising generating an inner region display signal (17) ; determining at least one of a brightness from the inner region display signal (see lightness rise or fall, see 0013; generating an outer region display signal (18) of the frame of the image using the at least brightness (see 0013) displaying an outer region of the frame of the image on the displaying using the outer region display signal, wherein the outer region is of substantially lower resolution than the inner region (see 0013).

Regarding claim 2, Hartmut discloses the method of claim 1, wherein generating an outer region display signal further comprises adjusting (see detection means 3) the outer region display

Art Unit: 2674

signal so that the outer region of the frame of the image blends with the inner region of the frame of the image (see abstract, see 0022).

Regarding claim 8, Hartmut discloses in fig. 2 that a wearable display comprising a display comprising a plurality of pixels, the display having an inner region and an outer region of substantially lower resolution than the inner region; and a controller operable coupled to the display, wherein the controller generates an inner region of substantially lower resolution than the inner region display signal, and an outer region display signal using at least a brightness as discussed above.

Regarding claims 13, 16, 20, Hartmut discloses the wearable display comprising determining an amount of distortion for image signal data (see high and low resolution, see 0008), the distortion acting to distort a source image conveyed by the image signal data so that a field of view of view of the source image is expanded (see the resolution of the non-gazing field is higher than the center of a gaze field (see 0008); adjusting the image signal data (see detection 3) so that source image conveyed by the image signal data is distorted to determine amount of distortion; generating a display signal using the adjusted image signal data; and displaying a distorted image on a display by using the display signal.

Regarding claim 18, Hartmut discloses the wearable display comprising an image source coupled to the controller (3), wherein the image source generates the source image (see abstract).

Regarding claim 19, Hartmut discloses the wearable display wherein the controller comprises a processor (see memory 8) coupled to the image source (see 0023), wherein the processor samples the source image signal.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-7, 9-12, 14-15, 17, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmut (JP 09-220200)

Hartmut discloses a method of displaying frames images using a wearable display device as discussed above, However, Hartmut does not disclose that the display comprising the outer region is substantially lower resolution than inner region; and outer region of less than 5 cycles per degree resolution, or the inner region of at least 15 cycle per degree resolution, and ratio between an inner region and an edge of the source image of between 2:1 and 20:1, or the outer region of the frame of the image further comprises illuminating an array of red, blue and green lights, or an array of white lights. From the claims 3-4, 9-10, 12, 14, 17, 21, it would have been obvious to one of ordinary skill in the art at the time the invention to have an outer region of less than 5 cycles per degree resolution, or the inner region of at least 15 cycle per degree resolution, and ratio between an inner region and an edge of the source image of between 2:1 and 20:1 as claimed since such a modification would have involved a mere change in range/shape of the

Art Unit: 2674

levels. A change in range/shape is generally recognized as being within the level of ordinary skill in the art.

See In re Rose, 105 USPQ (CCPA 1995) and

See In re Reven, 156 USPQ 679 (CCPA 1968).

From the claims 5-7, 11-12, it also would have been obvious to one of ordinary skill in the art to have the outer region of the frame of the image further comprises illuminating an array of red, blue and green lights, or an array of white lights because Hartmut discloses the image display resolution system having 20002-pixel magnitude matrix.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen  
May 11, 2005



**ALEXANDER EISEN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2600**